



The Mayfly Newsletter

Volume 19 | Issue 1

Article 1

5-1-2016

The Mayfly Newsletter

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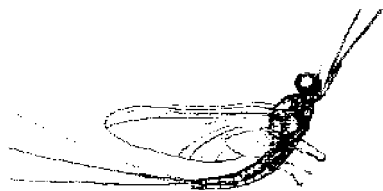
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Grant, Peter M. (2016) "The Mayfly Newsletter," *The Mayfly Newsletter*. Vol. 19 : Iss. 1 , Article 1.
Available at: <https://dc.swosu.edu/mayfly/vol19/iss1/1>

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THE MAYFLY NEWSLETTER

Vol. 19 No. 1

Southwestern Oklahoma State University, Weatherford, Oklahoma 73096-3098 USA

May 2016

2015 Joint International Conference - It Was Braw!

The XIV International Conference on Ephemeroptera and XVIII International Symposium on Plecoptera began Sunday evening, 31 May, with a wine reception at the James Hutton Institute in Aberdeen, Scotland. Our registration materials included a commemorative bag, T-shirt, program, and a miniature bottle of Grant's Scotch whisky – certainly the finest whisky in Scotland!

There were 64 participants, 11 accompanying people and they represented 29 countries.

Monday, 1 June

Craig Macadam, conference convenor welcomed the group and introduced Jenni Stockan, co-convenor. John Brittain, President of the Plecoptera Committee, also welcomed the participants. John reviewed events since the last meeting in Japan. He also noted the passing of Ken Stewart, John Hanson and Donald Webb, all from the USA and Lloyd Dosdall from Canada. He noted the challenges of documenting biodiversity and encouraged the younger scientists to embrace that challenge.

Next, Michel Sartori, Chair of the Mayfly Committee, welcomed participants. He introduced Alexa Alexander Trusiak as the committee's new treasurer and thanked Donna Giberson for her years of service as treasurer. Michel noted that the proceedings from the Japan conference have not yet been published (see p. 4 for more information). He also reminded everyone that the next joint conference will be in Brazil in 2018.

Michel also presented a slide showing conference attendance over the years. He suggested that we consider holding more conferences in the southern hemisphere to increase attendance.

He noted the passing of Uwe Humpesch (Austria). Later in the conference Jan Peters announced the passing of Juan Carlos Naranjo López (Cuba). Michel also encouraged those present to participate in the silent auction which provides travel scholarships for students.

The first keynote address was given by Ben Price, Curator of Odonata and Smaller Orders at the Natural History Museum in London. Ben discussed the history of the museum and its mission. Current challenges include not only maintaining a traditional organism collection but also one that now includes molecular specimens. Digitization is an additional process that museums must incorporate to deal with the large number of specimens (80 million at the museum!). However, one advantage of digitization is that data can be shared easily. He believes the museum's focus in the future will be on conservation and biodiversity.

A break followed. These were scheduled mid-morning and mid-afternoon and gave the participants an opportunity to have a drink, nibble on some snacks, mingle and review the posters in the adjacent room. Items for the silent auction were also available for viewing at these times.



The theme of the first session was phylogeny, taxonomy and systematics (Plecoptera). Lunch followed in the break room. Sandwiches, fresh fruit and drinks were provided. There were two sessions in the afternoon, both on the phylogeny, taxonomy and systematics of Ephemeroptera. During the day the accompanying persons were treated to a tour of Aberdeen.

At the end of the first day's presentations everyone was treated to a "Welcome to Scotland" social event. Dr. David Miller, Knowledge Exchange Coordinator of the Hutton Institute, welcomed the participants. He discussed the history of the institute and shared information about its namesake, James Hutton, the father of modern geology.

Next we were treated to a performance by a group of talented young ladies who demonstrated Scottish country dancing. The Plecoptera Committee met afterward. A tour of the old town portion of Aberdeen was arranged for the evening.

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Tuesday, 2 June

While the accompanying persons boarded a bus to Loch Ness the meeting began with a keynote presentation by Steve Ormerod on the changing ecology of Britain's rivers. He noted that the negative effects of global warming in streams may have been offset by improving water quality.

The morning session was on the ecology of Ephemeroptera. The afternoon sessions were on the ecology of Plecoptera and Ephemeroptera and behavioral ecology.

The Ephemeroptera Committee held a business meeting after the presentations (see p. 4 for a report). A riverside and historical walk was held in Aberdeen that evening.

Wednesday, 3 June

The traditional mid-conference tour was today. We left the Huton Institute about 8:30 on two buses and travelled west along the River Dee. We were presented with lovely pastoral scenes of cattle, sheep and crops. Yellow gorse was abundant on the hill and road sides and the land was divided by rock fences.

Our first stop was the Highland estate of Balmoral, the summer home of the Royal family. We had the opportunity to tour several buildings and the gardens. It was noted that the businesses in town displaying the Royal crest were suppliers to the Royal family.

We boarded the bus again, continuing to follow the River Dee upstream. For lunch we stopped at the Huntly Arms Hotel in Aboyne for sandwiches and soup.

The next stop in the Highlands was the Glen Tanar Estate. Here the group split up. Some followed a trail with a guide while others headed to the stream to collect. Dinner was a delicious barbeque next to the ballroom which was decorated with many hunting and fishing trophies. We headed back to Aberdeen after dinner.

Thursday 4 June

The morning session began with a keynote address by our convenors, Craig Macadam and Jenni Stockan, on the importance of mayflies. They discussed the contributions of provisioning, regulating, supporting and cultural services with most of the discussion on the latter. They presented an interesting Vodafone commercial that used the short life of the adult stage to make a point (<https://vimeo.com/11657441>). The following session dealt with distribution and biogeography.

After lunch the participants were invited to compete in the highland games, which were modified for aquatic entomologists to reduce the chance of permanent injury to participants and also the onlookers. We were divided into two clans – MacPerla and MacBaetis with the Institute staff providing directions and keeping score. MacPerla was leading MacBaetis at the end of the games but there was one more challenge – interpreting Scottish

expressions. (Read the 2nd last paragraph of this article to learn some of these expressions.) In the end Clan MacPerla prevailed.

The afternoon session focused on adaptation and change. After the last presentation, both committees met together briefly. As the next joint conference had already been approved, there was little business to conduct. Also at this time the winners of the silent auction were identified. A short while later the accompanying persons arrived from their trip to Baxter's Highland Village in Fochabers.

That evening buses transported participants to the Ardoe House Hotel for the traditional conference dinner. We were greeted at the door by a young lady playing the bagpipes. We assembled in the reception room for a bit of champagne and then moved to the dining area for our meal.

After a delicious dinner, John Brittain, representing the Stonefly Committee, announced the recipients of the Plecoptera travel scholarships and also the recipients of the Lifetime Achievement Awards – Stan Szczytko and Boris Kondratieff.

Next, Michel Sartori, for the Mayfly Committee, announced the recipients of the travel scholarships: Fabiana Criste Massariol (Brazil), Alexander Martynov (Ukraine), Lyndall Pereira-da-Conceicao (South Africa) and Pavel Sroka (Czech Republic). Lifetime achievement awards were presented to Tomáš Soldán, Ian Campbell and Elda Gaino (in absentia).

The results of the student poster competition were announced – Rie Saito (1st place) and Pavel Sroka (2nd place), followed by the oral competition – Louis Boumans (1st place) and Zohar Yanai (2nd place).

Alexa Alexander Trusiak, mayfly committee treasurer, reported that the silent auction generated £1132, which will be divided equally between the mayfly and stonefly committees for their travel scholarship funds.

Then the entertainment began. We were treated to a ceildh by Cabrach, a 3-man group, who played traditional Scottish music. The band leader explained the footwork for each folk dance before playing the music. The dance floor was covered with graceful aquatic entomologists. After a number of dances, we loaded the buses and headed back to our lodging.

Friday, 5 June

The accompanying persons loaded the bus for their final trip. They toured Crathes Castle near Banchory, a distillery in Fettercairn, and the ruins of Dunnottar Castle.

This was the last day of presentations. The keynote address was given by Will Darwall from the IUCN Global Species Programme. He identified freshwater habitats as a global hot spot of biodiversity – 10% of the known species in only 1% of the habitat. The decline in the number of freshwater species is greater than marine or terrestrial species. Freshwater ecosystem services are estimated to be worth \$29 trillion/year.

The morning session was on biodiversity and conservation and the afternoon session dealt with morphology. After the last presentation, Craig, Michel and John thanked the participants and Craig identified the other individuals who helped with the conference. Craig reminded participants that manuscripts for the proceedings are due by the end of October.

Frederico Salles, convenor of the Joint International Conference in Brazil in 2018, gave us an introduction to the meeting venue and program. He already has a Facebook site for the conference – “International Conference on Mayflies and Stoneflies, BRAZIL, 2018.”

Then everyone gathered for a final toast - Slàinte mhath! We were treated to fine Scottish beverages and snacks and took the opportunity to bid farewell to friends and colleagues.

Saturday, 6 June

This was the day of the post-conference tour. We left from the Institute early in the morning and headed west. Our first stop was in Keith for a tour of the Strathisla distillery which included a tasting of 4 whiskys.

Next, we stopped in Craigellachie at the River Spey, an important trout and salmon stream. Here participants took the opportunity to collect or admire the old bridge designed by Thomas Telford in the early 1800's.

We then traveled the second highest road in Scotland to have lunch at the Lecht, a ski resort. On the way back down we stopped for photos at the Corgarff Castle viewpoint. Here we had a lovely view of the castle, the summit of Lochnager (featured in a Lord Byron poem), and the Cairngorm Mountains.

Further down the road the bus had to cross a bridge over the River Gairn which had a weight limit. Passengers had to get off the bus to lighten it while it drove over the bridge. The bus made it!

The countryside was lush with vegetation. Sheep were plenty

and there were also horses and cattle, including the elusive (at least for photographers) shaggy highland cattle.

Our last stop was to the Muir of Dinnet National Nature Reserve and the Burn o'Vat Visitor Center. The Burn o'Vat is a geological depression formed by a glacier. Some folks went collecting while others walked along the nature trail. Then it was back on the bus and return to Aberdeen.

[Editor's note: If you don't parliamo Glasgow, you might refer to the following glossary while reading this paragraph.] The conference was a success. There were no crabbit people who told someone to awa 'an bile yer heid or haud yer wheesht. Some of the participants got clarty or drookit wanting to keek for mayflies and stoneflies during the field trips. However, this only increased their appetite for tatties and tumshies. While Craig and Jenni did look a bit peely-walley toward the end of the conference, they were always coothie hosts who never considered any request gleakit or participant a wee scunner. So, in summary, everyone had a braw time.

Photos, comments about the conference, and a copy of the final program are available on Facebook at <https://www.facebook.com/groups/aberdeen2015/>.

Glossary

Awa 'an bile yer heid – away and boil your head, get lost!

Braw – great

Clarty – dirty

Coothie – gentle, loving

Crabbit – bad tempered

Drookit – soaking wet

Gleakit – stupid

Haud yer wheesht – hold your tongue, be quiet

Keek – peek, look

Parliamo Glasgow – do you speak Glaswegian?

Peely-walley – pale

Tattie – potato

Tumshie – turnip, rutabaga in USA

Wee scunner – nuisance



2015 Joint International Conference Participants
Aberdeen, Scotland

Mayfly Committee - Business Meeting

Permanent Committee
of the International Conferences on Ephemeroptera
Business Meeting
2 June 2015, Aberdeen, Scotland

In attendance: Javier Alba-Tercedor, John Brittain, Ian Campbell, Peter Grant, Michel Sartori, Tomáš Soldán, Arnold Staniczek, and Alexa Alexander Trusiak.

Michel welcomed the committee members to the meeting.

Silent Auction. The organization of the silent auction was discussed. Javier asked everyone to encourage conference attendees to participate in the auction.

Travel Scholarships. Twelve students applied for travel scholarships to attend the conference and four were awarded. (See meeting summary on p. 1 for the names of recipients.) The convenors waived the registration for these students. There was a discussion as to how and when to give the students these scholarships. Electronic transfer allows the recipients to use the funds immediately. The committee recommended that the scholarships be awarded when the recipients arrive at the conference.

The committee discussed either increasing the scholarship amounts or increasing the number of scholarships. The most recent scholarships ranged from \$635 - \$1000 CAD. A limiting factor is the amount of money in the scholarship account. Participation in the auction, which provides the funds for these scholarships, needs to be encouraged.

For the next conference, it was suggested that we hold a two-part auction: a silent auction for items of lower value and a live auction for items of higher value.

Currently all of the members of the Permanent Committee are listed as trustees for the scholarship fund. This makes the paperwork more difficult. The committee discussed having a subset of the committee as the trustees. The new trustee list would be formed March 2016.

Alexa shared the financial statement with the committee (see the more recent statement in Table 1).

Establishing a Formal International Organization. It was noted that the organization must follow the rules of the host country.

The Mayfly Newsletter. Pete Grant will be stepping down as editor in the near future. Donna Giberson has offered to be the next editor. This was approved by the committee. Donna has experience with electronic newsletters. (See related article on p. 5.) It was suggested that future issues be stored on Ephemeroptera Galactica.

Ephemeroptera Galactica. The web site will be totally restructured to make it easier to add PDFs of articles.

Proceedings of Japan Conference. Michel has received no response from those involved with editing the proceedings of the Japan conference. Craig Macadam has agreed to include the papers from the Japan conference in the proceedings of the Scotland conference. [Editor's Note: An email I received recently indicated that the organizers of the Japan conference have begun to edit the proceedings from that conference. More information may be available in the next issue of *The Mayfly Newsletter*.]

Joint Business Meeting. A joint meeting with the Plecoptera Committee will be held Thursday after the last session.

Members of the Permanent Committee. Due to several reasons, some members of the committee are no longer active. One option is to replace these people with other members. It was suggested that we consider giving a title to those who have retired from studying mayflies, (e.g., "Emeritus Ephemeroptera").

Table 1

International Permanent Committee on Ephemeroptera Scholarship Fund - Financial Statement: as of 2 February 2016

Total 31 December 2014:		\$20,112.52
Income:		
Interest	18.12	
Donations	578.69	
Cash (Silent Auction)	674.06	
	Subtotal:	1272.32
Disbursements:		
Scholarship payment: Fabiane Massariol	1000.00	
Scholarship payment: Alexander Martinov	635.00	
Scholarship payment: Lyndall Pereira	635.00	
Scholarship payment: Pavel Sroka	730.00	
Account fees	53.95	
Bank charges associated with disbursing funds (money transfers; exchange)	35.33	
	Subtotal:	3089.08
Assets:		
	At maturity	At deposit
NB CIBC GIC 00063-9547975 *New, Matures 12 Mar 2016	4100.75	4100
PEI Bank of Nova Scotia GIC N510006000KYGMS *Matures 12 Sep 2016	11326.88	140952.01
	Subtotal:	140952.01
Accounts Receivable:		
CIBC Fredericton NB 00034-17-83319	3343.75	
	Subtotal:	3343.75
Total 2 February 2016:		\$18,295.76

Alexa E. Alexander Trusiak, Treasurer

02-Feb-16



Ch-ch-ch-changes

As we enter the 26th year of *The Mayfly Newsletter*, some changes are a-coming! Donna Giberson, former treasurer for the Mayfly Committee, has agreed to be the next editor of the *Newsletter*. Donna has served as editor for other newsletters and so comes to us with much experience. Donna and I will serve as co-editors of the fall 2016 issue and she will take over all editorial duties after that issue.

Another change is that the *Newsletter* will be produced digitally starting with the fall 2016 issue. This will make formatting changes much easier, allow us to introduce more color, and include active web links in the articles. The digital format also reduces costs considerably as there will no longer be charges for printing and postage.

In the future, those on the mailing list will be informed by email when a new issue is available. So, if you would like to continue to receive the *Newsletter*, please send your current email address to Pete Grant (peter.grant@swosu.edu). Digital issues will also be stored on the Ephemeroptera Galactica web site.

Newsletter News



The Mayfly Newsletter celebrated 25 years of keeping ephemeropterists informed - 1990-2015!

Mayfly Photo Needed

Do you have a nice color photo of a mayfly that could be used for the masthead in the next issue of *The Mayfly Newsletter*? If so, please send a copy to Donna Giberson (dgiberson@gmail.com).

Do You Want to Continue to Receive This Newsletter?

To receive the next issue of *The Mayfly Newsletter*, please send your email address to Pete Grant (peter.grant@swosu.edu). Future issues will only be produced digitally. Printed copies will no longer be available.

Members of Permanent Committee - 2016

The composition of the Permanent Committee of the International Conferences on Ephemeroptera has recently changed. Two members, John Flannagan and Elda Gaino, retired.

For the Committee to operate as a nonprofit entity, it will be necessary to establish a Board of Trustees. Members for this board will be selected this year and will be identified in the next issue of the *Newsletter*.

Current members of the committee, their position, and their contact information follow.

Javier Alba-Tercedor, Universidad de Granada, Facultad de Ciencias, Departamento de Biología Animal Ecología y Genética, 18071 Granada, Spain, jalba@ugr.es

John Brittain, Freshwater Ecology and Inland Fisheries Laboratory (LFI), The Natural History Museums and Botanical Garden, University of Oslo, PO Box 1172, Blindern, 0318 Oslo, Norway, j.e.brittain@nhm.uio.no

Ian Campbell, Department of Ecology and Evolutionary Biology, Monash University, East Caulfield, Victoria 3145, Australia, I.C.Campbell@bigpond.com

Eduardo Domínguez, Facultad de Ciencias Naturales, Universidad Nacional de Tucumán, Miguel Lillo 251, 4000 Tucumán, Argentina, mayfly@unt.edu.ar

Peter Grant, Secretary, College of Arts and Sciences, Southwestern Oklahoma State University, 100 Campus Drive, Weatherford Oklahoma 73096-3098, USA, peter.grant@swosu.edu

Michel Sartori, Chairman, Musée cantonal de zoologie, Palais de Rumine, Place de la Riponne 6, CH-1014 Lausanne, Switzerland, michel.sartori@vd.ch

Tomáš Soldán, Institute of Entomology, Academy of Sciences of the Czech Republic, University of South Bohemia, Branišovská 31, 37005 České Budějovice, Czech Republic, soldan@entu.cas.cz

Arnold Staniczek, Webmaster, Staatliches Museum für Naturkunde, Abt. Entomologie, Rosenstein 1, D-70191 Stuttgart, Germany, staniczek.smns@naturkundemuseum-bw.de

Alexa C. Alexander Trusiak, Treasurer, NSERC Visiting Fellow, Environment Canada at the Department of Biology and Canadian Rivers Institute, University of New Brunswick, #10 Bailey Drive, PO Box 4400, Fredericton, NB, Canada E3B 5A3, alexa@ecobmi.com.

Emeritus Ephemeroptera
John Flannagan, Canada
Elda Gaino, Italy

Richard Henry Daggy, Ph.D., Dr.P.H. (1914–2001)

Chad H. Parker, Associate Professor of History, University of Louisiana at Lafayette (chparker@louisiana.edu) and
Luke M. Jacobus, Assistant Professor of Biology, Indiana University Purdue University Columbus (luke.jacobus@gmail.com)

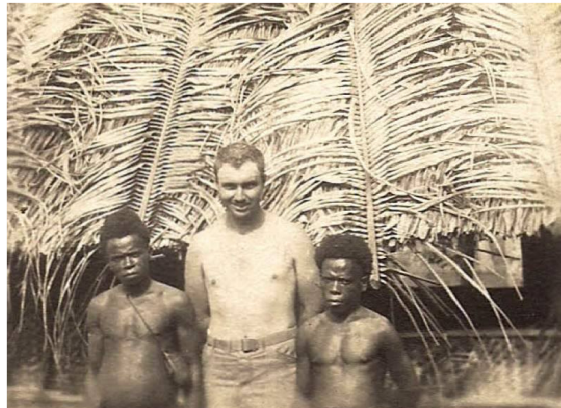
Many mayfly scientists are familiar with the name Richard H. Daggy. Daggy studied the mayflies of Minnesota for his master's thesis (1938) and doctoral dissertation (1941) at the University of Minnesota. These studies resulted in publications during the mid-1940s about mayfly gynadromorphism, new species and previously undescribed larvae that remain important to this day. Few in the Ephemeroptera research community, however, are aware of Daggy's major contributions to science and society after he left mayflies. One of our colleagues once told LMJ that Daggy simply faded into obscurity. It turns out that he did anything but fade away.

After completing his academic work at the University of Minnesota, Daggy joined the US Navy, where he served in World War II. His journal kept during this time has recently been donated to LMJ by his son, Hormoz Soheili of Francetown, New Hampshire. The journal describes his experiences and details Daggy's transition to the distinguished career he built after mayflies. Along with the journal, other papers and effects were donated to LMJ that included a humorous letter from his father (Richard L. Daggy), dated 28 April 1942. This letter perhaps sheds light on the younger Daggy's move away from mayfly science, in that the elder Daggy encourages his son to investigate an alternate career path that "does not necessarily mean chasing bugs indefinitely. It might prove a stepping stone for bigger things..." Though the younger Daggy's "alternate career path" involved "bugs," achieving "bigger things" he did.

In the Navy, he was part of the Malaria Control Unit in the South Pacific, with a focus on the New Hebrides. He then served as an Associate Entomologist with the Naval Medical School until 1945. After returning home from the War, he taught Biology at the University of Minnesota for two years; subsequently, he became the Medical Director for the American Arabian Oil Company (Aramco) in Dhahran for seventeen years and was then invited to teach public health at Harvard University where he remained for ten years. The high points of his years at Harvard involved twice being

Acting Dean for the School of Public Health. He retired from Harvard in 1982. The importance of Daggy's work with the Aramco, in particular the corporate malaria control efforts in Saudi Arabia, 1947-1979, recently has come to the scholarly attention of CHP.

In June 1947, Daggy's career took a turn that he could not have predicted. From that date through 1956, he headed the Arabian American Oil Company's malaria control program in the Eastern Province of Saudi Arabia and then went on to direct preventive medicine programs for the company until his retirement in 1964. At his initial interview, Daggy wondered, he later said, how "a good, self-respecting malaria mosquito could make its way in Saudi Arabia." He soon discovered, however, that the population centers near the oil industry indeed had a serious malaria problem.



"New Hebrides, Espiritu Santo, 1943"

American employees lived in "American Camp," a safe distance from the malarious regions of the Kingdom, but Saudi employees in the nearby oases had lived with the disease, as Daggy states, "from time immemorial to the present." For Daggy, and Aramco, this meant lost work time and difficulty maintaining employee "direction." And just as important, Saudi Arabia's King 'Abd al-Aziz

was interested in DDT. So malaria control, the company figured, could play an important role in corporate-Kingdom relations.

Daggy was brought to Saudi Arabia to find a way to control malaria, and he quickly got to work studying the problem in the area. Through surveys, exams, and studies of available clinical data, he learned that upwards of 90 percent of residents in the two major oases in the region—al-Hasa and Qatif—had the disease. These were where many of Aramco's Saudi employees lived, and as the company expanded, it is also where it hoped to find more workers. Daggy's diagnosis of the problem, however, was not what one would have expected at a time when vector control—known as the "American Way"—dominated malaria control programs. Daggy claimed that the disease was "man made." Aramco's malaria control team, headed by Daggy, argued

that the disease resulted from underdevelopment. Environmental factors like climate and topography mattered, but inefficient agricultural practices and water use, poor living conditions, and a general lack of education and proper hygiene made malaria endemic to the region. Daggy recalled of his time working in the American South for the Public Health Service after the World War II that malaria seemed to be most widespread “in the negro shacks” and among “very poor people.” His characterization of the disease in Saudi Arabia’s Eastern Province was not a new one, for sure, but it could challenge accepted norms in the postwar era for handling it.

Following the war, a powerful global discourse held that tropical disease retarded economic development in what became known as the “Third World.” Daggy seemed to reverse this relationship between disease and development suggesting an alternative course for malaria control, but practitioners continued to see disease as an obstacle to development and so vector control, attacking the mosquito, held sway. There were just too many alleged success stories celebrating the triumph of this approach. After the discovery of the seemingly magical new chemical DDT around the same time, it almost seemed crazy to approach control any other way.

Despite Daggy’s investigation into the socio-economic roots of the malaria problem in the Eastern Province and his reconfiguration of the disease-development link, Aramco pursued vector control, beginning its program of residual spraying of DDT in 1948. Public perception, as much as science, ruled the day. Daggy doubted that many realized the association between the mosquito and malaria, but they did understand the power of the new insecticide DDT. Moreover, World Health Organization (WHO) officials recognized how such programs supported public diplomacy stating, “the people realize immediately the benefits of the spraying.” Saudi dignitaries went so far as to call in Daggy’s spray teams to serve as exterminators, purging royal palaces and stables of scorpions, flies, and ticks.

DDT contributed effectively to corporate public diplomacy, but it ultimately failed as a long-term solution to the malaria problem in the Kingdom. While extremely successful at the start, within a few years, the chemical’s effectiveness waned. By 1954, rates of malaria infection climbed again, despite regular application of DDT. The mosquito had adapted. Other insecticides followed the same course, and eventually the program came to rely on older larvicides that had been used globally decades prior. The company turned the program over to the Saudi Arabian government in 1956 and with assistance from WHO in 1965 started to turn to more socio-economic solutions, rather than just relying on residual spraying alone. WHO redirected efforts toward water usage and agricultural development, while the Saudi government stressed educational and curative approaches. Together, they brought an end to malaria’s certainty in the Eastern Province by 1979.

Daggy’s contribution is important, but the results of his work were mixed. He identified the scope and depth of the problem and showed that the disease could be brought under control. In retrospect, despite his diagnosis of the problem, his science became hijacked both by the prevailing global ideology of malaria control and by corporate public diplomacy. It is unfortunate that he could not have pursued more fully the successful approach that the Kingdom and WHO eventually initiated. After all, it was his idea.

To read more about Richard H. Daggy and malaria control in the Eastern Province of Saudi Arabia, see *Making the Desert Modern: Americans, Arabs, and Oil on the Saudi Frontier, 1933-1973*, by Chad H. Parker, published in May 2015 by the University of Massachusetts Press.

Purdue Type Collections

Luke Jacobus reports that data from the Purdue Entomological Research Collections are now available online at <http://symbiota4.acis.ufl.edu/scan/portal/collections/misc/collprofiles.php?sgl=1&collid=58&country=Sumbal%20and%20Wular%20Lake>. You can also find this web page by searching for “PU-PERC.”

The Mayfly Newsletter (ISSN 1091-4935) is the official newsletter of the Permanent Committee of the International Conferences on Ephemeroptera and is published to facilitate communication among ephemeropterists. Subscriptions to the *Newsletter* are free. To place your name on the mailing list or to contribute information for the next issue, contact Peter M. Grant, editor, *The Mayfly Newsletter*, College of Arts and Sciences, Southwestern Oklahoma State University, 100 Campus Drive, Weatherford, Oklahoma 73096-3098 USA, phone (580) 774-7152, FAX (580) 774-7085, email peter.grant@swosu.edu. This publication was authorized by the Dean of Arts and Sciences and was printed at a cost of \$764.00 for 500 copies.



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Addendum to Book Review of *The Mayflies of Europe*, by Bauernfeind & Soldán (2012), Published in *American Entomologist* 61(3), DOI: 10.1093/ae/tmv056

Luke M. Jacobus, Indiana University Purdue University Columbus,
Columbus, Indiana, USA, luke.jacobus@gmail.com

I recently reviewed *The Mayflies of Europe*, by Bauernfeind & Soldán (2012. Apollo Books, Ollerup, Denmark. 781 pp. ISBN 978-87-88757-45-3), in *American Entomologist*, a publication of the Entomological Society of America. This is at least the third review of the work, following those of Elliot (2012) and Howarth (2013). I cited various pertinent works, but a references section was not possible due to space constraints in *American Entomologist*. Instead, readers are referred here, to *The Mayfly Newsletter*. The following references are those cited in my review.

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2018 Joint International Conference – Aracruz, Brazil

The 2018 Joint Meeting of the XV International Conference on Ephemeroptera and XIX International Symposium on Plecoptera will take place in Aracruz, Brazil, 2018.

The conference will be held at the SESC Praia Formosa, a pleasant place located less than one hour (or 45 km) from the airport of Vitória, capital of Espírito Santo. With more than 200 rooms, conference halls, exposition areas, restaurants, and a huge area in front of the beach, SESC Praia Formosa is the perfect place for hosting the conference in Brazil.

More information on scientific program, dates, deadlines, costs, proceedings, and accompanying persons program will be available soon at <http://ephemeroptera.com.br/jointmeeting/>. You can also access information on our page on Facebook (International Conference on Mayflies and Stoneflies, BRAZIL, 2018) or contact us by e-mail (ffsalles@gmail.com).

2014 Ephemeroptera Bibliography

Compiled by Luke M. Jacobus, Division of Science, Indiana University Purdue University Columbus,
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I put together the following list of publications as part of the Society for Freshwater Science's 2014 Literature Review for Ephemeroptera. It is not intended to be an exhaustive list, but rather it is one that includes papers with a major emphasis on mayflies. A couple of technically unpublished papers are included. I made efforts to verify each citation, but in a few cases, I was unable to obtain the actual publication. Also, I am sure that I made errors. **Please report corrections to me.**

I hope to remain on the SFS Literature Review Committee for several years, so please send me citations for your publications, so that I can be sure to include them. Of course, I prefer to receive copies of the publications themselves to add to the Ephemeroptera literature collection from Purdue, most of which is now in my care. **If you have literature that you cannot locate, please let me help.**

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Two questions:

1. Have you published a paper on mayflies?
2. If so, did you send a PDF to EG?

Ephemeroptera Galactica (EG) is a web site that was developed by Mike Hubbard and is now maintained by Arnold Staniczek. One of the great features of EG is the bibliography of mayfly literature at this site. PDFs of hundreds of mayfly articles are available. To keep this bibliography updated, please send a PDF of your articles on mayflies to Arnold (stanieczek.smns@naturkundemuseum-bw.de).

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